

Conclusion: EG offers a reasonable treatment option for wound healing with over 70percent healing rate. The current data lacks level 1 evidence. Methodologically sound randomised controlled trials to compare against split thickness skin graft are necessary.

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0141: GIANT CELL TUMOURS OF TENDON SHEATH; A 10-YEAR EXPERIENCE FROM MANCHESTER

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Introduction: Giant cell tumours of tendon sheath (GCTTS) often masquerade as other tumour-like lesions. Incomplete excision is thought to contribute to recurrence; rates range from 5–45%. We aimed to evaluate the role of imaging, completeness of excision, and recurrence rates.

Method: Consecutive patients from 2005–2015 with a histopathological diagnosis of GCTTS in the upper limb were identified retrospectively from our coded online reporting system. Demographic data, clinical diagnosis, macro- and microscopic, and radiological tumour characteristics were recorded.

Result: 47 patients(49 GCTTS) were identified; median age 49 years(IQR 34–64). The most common site was the index finger(18,37%) vs thumb(10,20%), middle finger(10,20%), little finger(5,10%), and lesions proximal to the MCPJs(5,10%). The mean maximum dimension was 15mm(SD 7). 18(37%) GCTTS were imaged, including plain radiographs(12,24%), ultrasound(10,20%), and MRI(5,10%). 4(40%) were reported by ultrasound as GCTTS vs 3(60%) by MRI. Diagnosis prior to histology was correctly GCTTS in 30(61%) vs mucous cyst(6,12%), ganglion(5,10%), gout(2,4%), and other(6,12%). Excision margins were clear in 25(51%) tumours and indeterminate in 24(49%). None had malignant features. The recurrence rate was 10%(5).

Conclusion: Recurrence rates were low despite half of GCTTS being excised with indeterminate excision margins. Imaging was valuable for operative planning in some cases, but not for diagnosis.

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0146: BILATERAL V TO Y INFERIOR GLUTEAL ARTERY PERFORATOR (IGAP) FLAPS FOR ABDOMINOPERINEAL (AP) RECONSTRUCTION

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Introduction: More radical excisional surgery, especially for those with recurrences has resulted in large perineal defects. For laparoscopic assisted abdominoperineal (AP) resection, keeping the reconstruction outside the abdominal cavity is a sensible option. Inferior Gluteal Artery Perforator (IGAP) flaps are a reliable and easy method of reconstruction following AP resection for rectal tumours.

Method: Five patients had ten IGAP flaps for AP reconstruction. Bilateral V to Y perforator based flaps were performed were performed with pt prone. The medial portion of each IGAP were de-epithelised and sutured together then advanced into the defect. At least a 6cm advancement was achieved from each side to obliterate the dead space.

This technique allows the natal cleft to remain in the midline in contrast to unilateral IGAPs. No violation of anterior abdominal wall is required, unlike a VRAM.

Result: There were no flap failures, partial loss or wound dehiscence. Reconstructive operating time was less than 60 minutes.

Conclusion: The use of the IGAP flap prevents interference of stoma sites and further insult to the abdominal wall. This shortens recovery time, we conclude that IGAP flaps are a reliable, technically easy and a quick method of reconstruction following AP resection for low rectal tumours.

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0278: REORGANISATION OF CRANIOFACIAL SERVICES WITHIN NORTH WEST THAMES

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Aim: Merging West Middlesex and Chelsea and Westminster Hospital Trusts provides an opportunity to streamline the pathway for patients with facial trauma.

Method: We conducted a retrospective analysis of patients presenting to West Middlesex Hospital Emergency.

Department with facial trauma between April 2014–March 2015.

Result: 64 patients were included (46 males, 18 females). There were 51 adults and 13 children. Facial fractures.

(30%) were the commonest sequelae of facial trauma, followed by dental (25%) and soft tissue injuries (14%). 11 patients (17%) were referred with clinically suspected facial fractures but normal plain x-rays. The majority of fractures were mandible (n=9), then nasal (n=2), orbital wall (n=2), mandible dislocation (n=2) and fractures involving multiple facial bones (n=2). 85% of bony injuries were referred to a distant hospital and 80% of soft tissue injuries were referred to the Chelsea and Westminster Hospital. 8 out of 27 patients with bony injuries referred externally were asked to attend an eye review at a separate hospital prior to assessment at the Craniofacial Unit.

Conclusion: We present data prior to re-organising craniofacial trauma services within North West Thames. We aim to bring the management of facial trauma into a semi-elective setting and provide a one-stop service.

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0394: TO CELLUTOME OR NOT TO CELLUTOME? A PATIENT REPORTED OUTCOME MEASURE AND COST EVALUATION STUDY

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Aim: Split-thickness skin grafts (SSGs) are a useful method for covering defects. However, they require anaesthesia, access to specialist equipment and staffing and can have high donor site (DS) morbidity. The CelluTome epidermal graft-harvesting device is an alternative, providing pain-free epidermal-skin grafts (ESG) in outpatient settings with minimal DS trauma. This study aims to compare ESG with SSG by evaluating patient-related outcome measures (PROMs) and associated costs.

Method: Twenty patients answered a validated subjective skin graft satisfaction questionnaire evaluating donor/graft site noticeability, aesthetic concerns, adverse problems and patient satisfaction. Costs were calculated for each group based on operative expenses and dressing clinic appointments.

Result: Complete satisfaction with DS appearance was observed in 100% of ESG cases compared with 50% of SSG cases. Noticeability, adverse problems and overall satisfaction were significantly better in the ESG group compared with the SSG group ($p<0.05$). Graft site parameters were comparable with similar healing outcomes. Cost/patient for ESG was £431 and £1489 for SSG, resulting in annual savings of £126,960 based on ten cases/month.

Conclusion: CelluTome provides comparable wound healing to traditional SSGs, with reduced DS morbidity and higher patient satisfaction. Moreover, CelluTome facilitates the outpatient treatment of wounds whilst substantially reducing costs.

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0420: TOPICAL GLYCOPYRROLATE REDUCES AXILLARY HYPERHIDROSIS TO A SIMILAR EXTENT AS SUBCUTANEOUS BOTOX INJECTIONS

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Introduction: Axillary hyperhidrosis affects 3% of the population. Subcutaneous botulinum toxin A (Botox) is the current “Gold Standard” treatment for severe cases. Conversely, the effectiveness of topical anticholinergic solutions is unclear. This study compares the effectiveness of

1% and 2% topical glycopyrrrolate with Botox injections for the management of axillary hyperhidrosis.

Method: Forty consecutive patients with axillary hyperhidrosis were allocated to one of four study groups (10 patients to each group): (i) 1% glycopyrrrolate spray; (ii) 2% glycopyrrrolate spray; (iii) Subcutaneous Botox injections; (iv) No treatment (control).

Clinical outcomes were measured using a prospectively-administered questionnaire, completed both pre-treatment and 6 weeks after starting treatment. Forty healthy volunteers without axillary hyperhidrosis completed the same questionnaire. Pre- and post-treatment scores were compared within and between study groups.

Result: All three treatment groups showed a significant ($p < 0.05$) improvement in their hyperhidrosis scores following treatment. The degree of improvement was less for the 1% glycopyrrrolate group when compared with the Botox group ($p < 0.05$), but there was no difference in treatment outcomes between the 2% glycopyrrrolate and Botox groups. No treatment group reduced the hyperhidrosis to a level similar to those without hyperhidrosis.

Conclusion: 2% topical glycopyrrrolate spray is as effective as Botox injections for the treatment of axillary hyperhidrosis.

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0743: RECTUS ABDOMINIS DIASTASIS AND OUTCOMES OF SURGICAL CORRECTION: A SYSTEMATIC REVIEW

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Aim: Surgical correction of Rectus abdominis diastasis and its indications remain controversial. This study aims to review the outcomes of its surgical correction.

Method: Medline and EMBASE databases were searched for original studies pertaining to the surgical correction of rectus abdominis diastasis.

Result: A total of 73 articles were identified, 8 of which were relevant for assessing the long-term outcomes and success rates of surgical correction. With the exception of two studies, all studies showed a zero percent recurrence rate. A 10% reoccurrence rate at 1-year and 40% at 64-months follow up were noted in two studies, respectively. No major complications or deaths were reported.

Conclusion: Vertical plication of the anterior rectus sheath may be considered safe, although reoccurrence has been reported. A future study with a large sample size and a long follow up period assessing reoccurrence using a paramedian method of vertical and transverse plication with strict definitions of reoccurrence needs to be performed. Criteria for treatment should however be degree of abdominal distension rather than the degree of diastasis.

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1013: ABDOMINAL FREE FLAP BREAST RECONSTRUCTION OUTCOMES AND COST ANALYSIS: A REVIEW OF 172 CONSECUTIVE CASES

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Aim: The deep inferior epigastric artery perforator (DIEP) free flap is considered the gold standard for autologous breast reconstruction. We present the outcomes and cost analysis of abdominal free flap breast reconstruction (FFBR) at a single hospital.

Method: All abdominal FFBRs performed (July 2010–September 2014) by the senior authors were evaluated. Outcomes including hospital stay and complications were retrospectively correlated with patient demographics, comorbidities, tumour characteristics, use of adjuvant therapy, reconstruction type, surgical technique and timings. Actual costs were compared with reimbursement from Health Resource Group tariffs.

Result: A total of 172 patients with mean age 52 years (range 28–79) underwent 193 FFBRs (21 bilateral, 151 unilateral; 110 delayed, 83 immediate) including 178 DIEP flaps. Mean total theatre time was 331 min (unilateral delayed), 339 min (unilateral immediate) and 452 min (bilateral). Average inpatient stay was 4.4 days. Complications occurred in 31 patients (18%) including 3 flap failures (1.6%). Compared to received reimbursement, the average actual costs for unilateral delayed (£4540), unilateral immediate (£4787) and bilateral (£6205) FFBRs resulted in net profits of £2899, £2652 and £1367 per case respectively.

Conclusion: Our study allowed us to identify areas to improve service delivery and efficiency.

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1218: RE-AUDIT: CHALLENGES IN EDUCATING BURN VICTIMS ON HOW TO APPLY FIRST AID TO BURN INJURIES PRIOR TO ARRIVAL IN HOSPITAL

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Background: Adequate burns first aid affects the progression and outcome of a burn injury. It is well known that there are different educational and compliance challenges in the adult versus paediatric population. The British Burns Association (BBA) introduced the first national UK burns awareness day to address these challenges.

Method: A retrospective re-audit of adult and paediatric inpatients admitted to the burns unit before and after the intervention of a BBA national burns awareness day. Deliberate injury, chemical and electrical burns were excluded. Data was collected over 2 months with the standard being the NICE burns first aid guidelines of stopping the burn(S), removing clothes(R), running under cool water(W).

Result: In total 101 patients sustained either a flame/scald burn, 21 were excluded due to inadequate documentation. Burn first aid was attempted in 93% vs 100% of children in the re-audit. This compared to burns first aid being attempted in 60% vs 73% of adults in the re-audit. The component consistently performed incorrectly, despite attempting, was cooling the burn wound. Less than 50% did this (W) properly across both groups.

Conclusion: Room exists to improve public awareness of burns first aid, particularly the appropriate cooling of a burn.

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1221: PLASTICS OPERATIVE WORKLOAD IN MAJOR TRAUMA CENTRES: A NATIONAL PROSPECTIVE SURVEY

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Background: The introduction of major trauma centres (MTCs) in the UK in 2012 has resulted in a significant improvement in trauma survival. The impact of the major trauma network on plastic surgical operative workload has not previously been described. This study aims to quantify this workload to help guide service design, postgraduate training, and workforce provision.

Method: A prospective, multicentre study was performed over a three-month period. All Trauma Audit & Research Network-eligible patients presenting to eleven MTCs in England were identified. Operative data was obtained for those requiring plastic surgery.

Result: Surgical intervention was required in 1,582 of the 2,963 (54%) patients admitted over the study period.

Of those requiring surgery, 227 patients (14%) required plastic surgical intervention over 366 operations. During these operations, 847 procedures were performed, mainly on the extremities (81%). Wound debridement occurred in 63% of operations and free flaps in 10%. Consultant plastic surgeons performed 61% of operations.

Conclusion: Although major trauma is often an unrecognised aspect of the plastic surgeon's workload, this data demonstrates the importance of the